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Perinatal Quality Improvement

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Perinatal Quality Improvement

At the end of this presentation, the participant will be able to:

- Identify the risks associated with our current model of perinatal care
- Recognize options for system change and improvement
- Understand the reliable design strategy of the Perinatal Collaborative of the IHI

Dr. Cherouny has no disclosures to make and no conflicts of interest regarding this presentation

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- *What we say*
  - Priorities for Action were chosen based upon national indicators or data sets chosen by AHRQ, NQF, and/or other national safety organizations. Excellence in these priority areas...
  - The strategy calls for an individual ministry to develop that blueprint, pilot the spread to four or five Beta sites, and then lead the dissemination of the strategy/change package…

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- *What we hear*
  - Blah blah blah blah quality blah blah blah blah outcomes blah blah blah blah blah blah blah blah blah blah blah blah blah liability premiums going up blah blah blah blah blah blah blah blah blah blah blah blah blah outcomes blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah don't mess up

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Perinatal Quality Improvement

- What do we know about our system of care
- What we (perhaps) don't know about our system of care

Perinatal Quality Improvement

- What do we know about our care
  - Up to one-third of elective deliveries occur prior to documented fetal maturity
  - 53% of the disparity in cesarean section is related to labor induction and early admission
  - Patient centered care is talked about but rarely practiced
  - 45% of patient admissions have significant commission or omission errors during their care
  - Communication errors are the leading cause of sentinel events in perinatal care

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Perinatal Quality Improvement

- What we (perhaps) don't know about our care:
  - Perinatal mortality in the US is 29th in the world among developed nations
  - Maternal Mortality is 40th in the world and is increasing
  - Maternal Mortality in the US has increased at an annual rate of 2.1% for the last 20 years
  - Up to 90% of birth trauma is preventable

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- "We are confident that this higher level of care cannot be achieved by further stressing current systems of care. The current care system cannot do the job. Trying harder will not work. Changing systems of care will."

The Institute of Medicine -Crossing the Quality Chasm

Perinatal Quality Improvement

- Changing system of care into what?
- What do we need to do?
  - Prevent the preventable
  - Defend the unpreventable

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Perinatal Quality Improvement

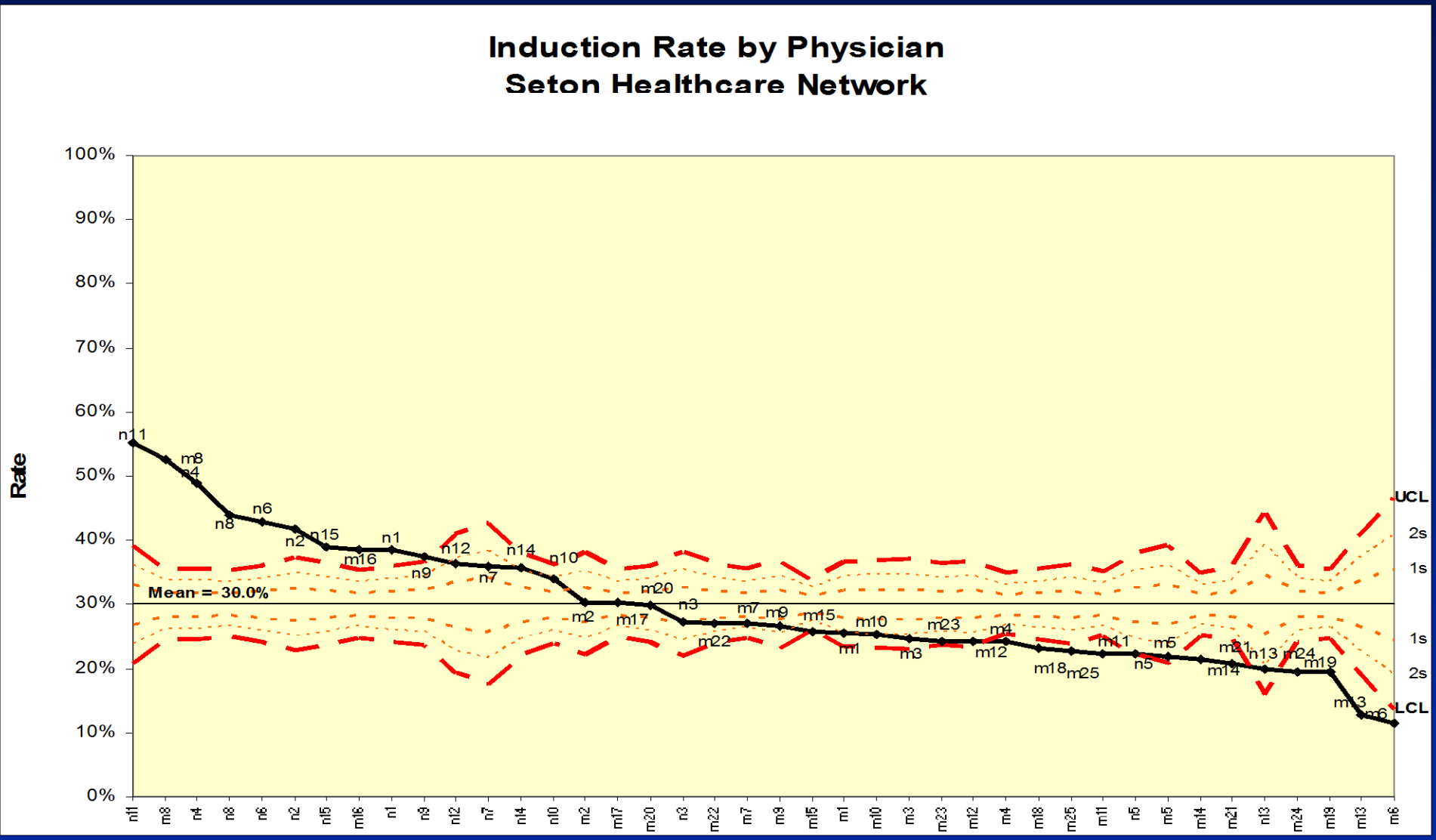
- Changing system of care into what?
  - Engage leadership/administration
  - Develop reliable systems of evidence-based care
    - Perinatal Bundles
  - Multidisciplinary training
  - Communication skills training
  - Measurement

Why focus on perinatal care?

- Good science exists

- Significant variability in process.
  - Care is provider driven rather than standardized.
  - This autonomous practice focus contributes to the unreliable delivery of care.

Acceptable Variability?



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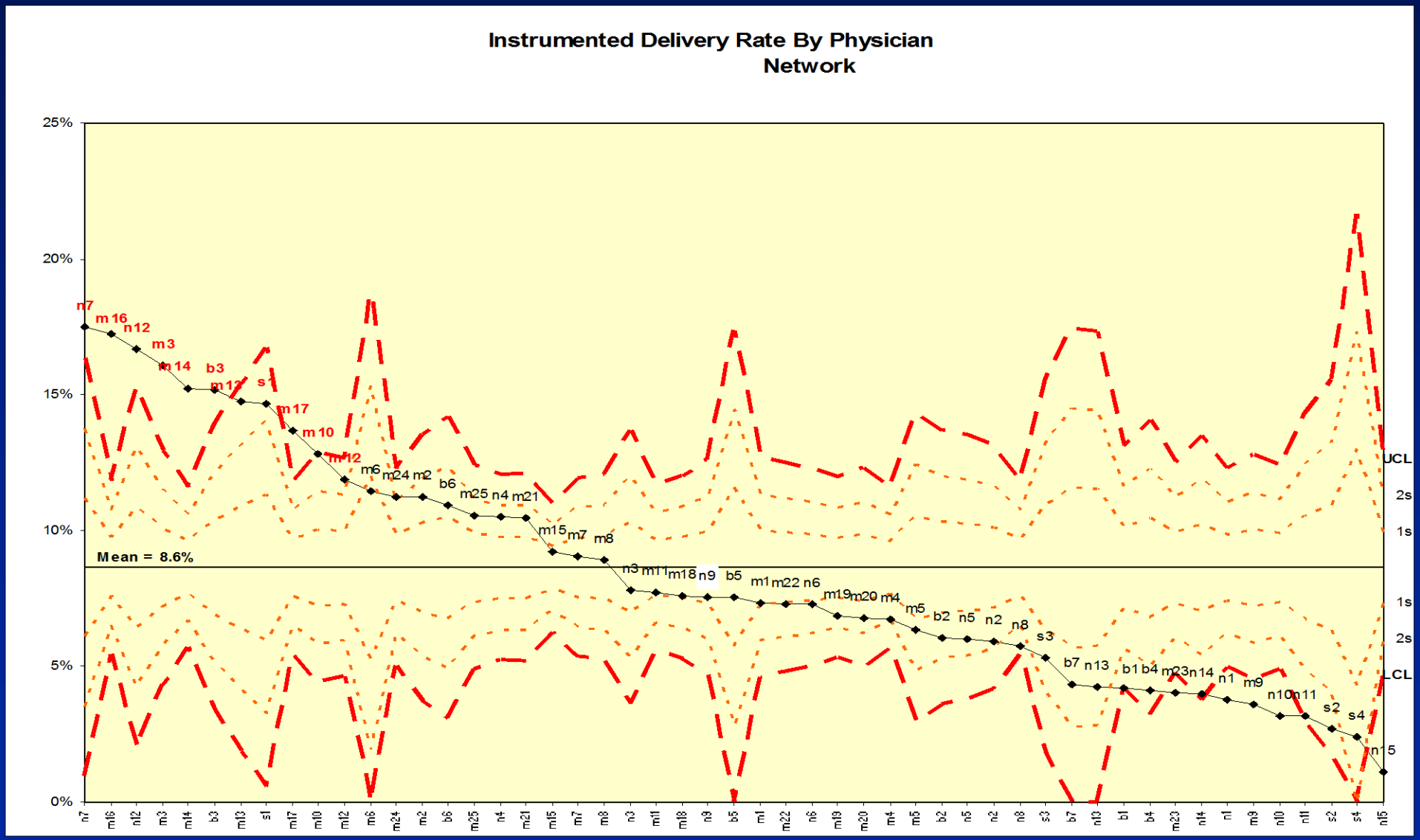

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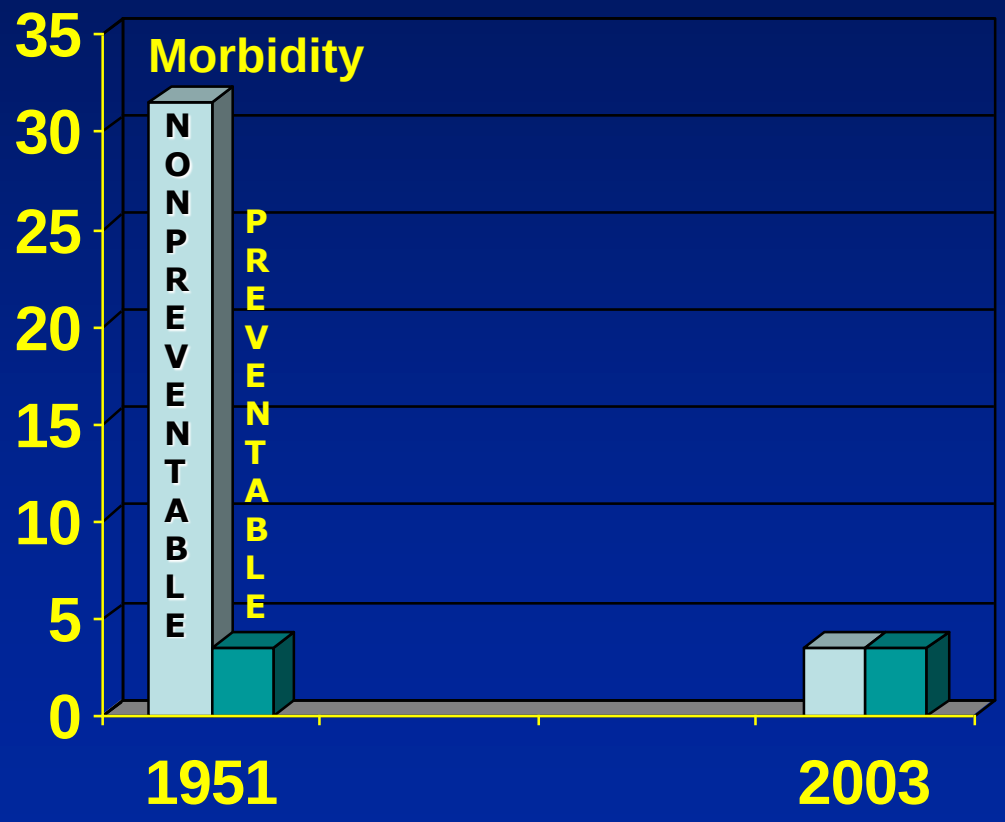
Why is this important now

Birth Injury per 1000



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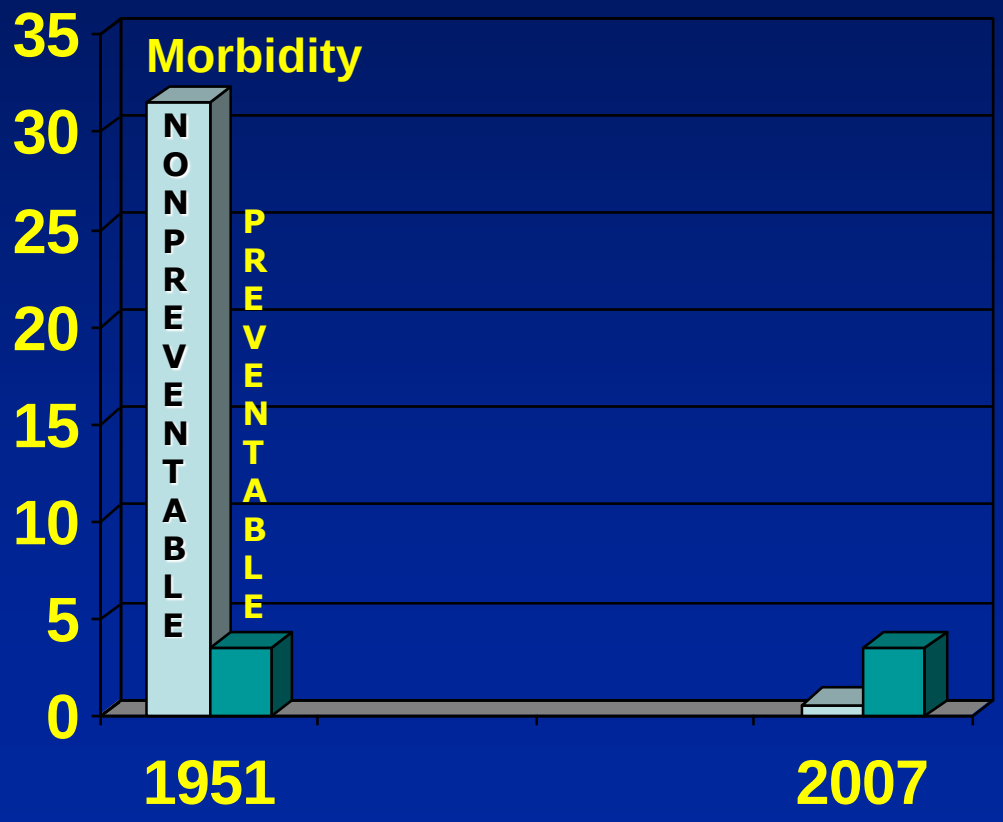

Mazza F, et al. Eliminating birth trauma at Ascension Health.
Jt Comm J Qual Patient Saf 33:15-24, Jan. 2007

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Why focus on perinatal care?

2007

4,317,119 births in US

Birth trauma 6.3-7.3/1000

estimated 80-90% are preventable

What does that mean for LA?

Baton Rouge

50-55/yr

40-45 preventable

Louisiana

390-450/yr

320-355 preventable

East Baton Rouge

70-80/yr

56-63 preventable

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What does that mean for US?

27,000-32,000 injured babies total

22,000-24,000 preventable

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What do we want to do?

Prevent the preventable

Defend the unpreventable

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- Changing system of care into what?

Model for Improvement* (MFI)

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

*Developed by the Associates in Process Improvement.
Building on the work of W.E.Deming and Walter Shewhart

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Perinatal Community:
Reducing Harm,
Improving Care,
Supporting Healing

Reduce harm to 5 or less per 100 live births

Zero incidence of elective deliveries prior to confirmation of fetal maturity

Augmentation Bundle(s) Composite or Compliance greater than 90%

Improve organizational culture of safety survey scores in Perinatal units by 25%

100% of participating teams will have documentation of Patient & Family Centered Care

Perinatal Leadership

- Align Unit Measures Strategies Projects with Org Strategy and Goals (Clinical , Patient, Exp. Financial and Workforce)
- Channel Senior Leadership Attention and Develop Unit Leadership
- Engage Physicians
- Build Improvement Capacity and Provide Resources for Improvement
- Establish a Just Culture
- Develop a Competent Trained and Available Workforce
- Establish Credentialing of Core Competency and Training for all Providers
- Use ACOG/AWHONN Guidelines for Documentation and Staffing
- Develop a Consumer Advisory Board

Reliable Design / Reduce Variation

- Execute care that meets national standards (Implement Bundles, Perinatal Core Processes)
- Develop standard processes and protocols for response to obstetrical emergency
- Design care process improvement based on trigger tool analysis, event detection, sentinel event
- Standardize administration of high alert medications – oxytocin, magnesium sulfate, epidurals
- Create an environment that Supports Care and Healing
- Consider segments of population and design reliable and appropriate processes for specific needs and characteristics of this segment of the population

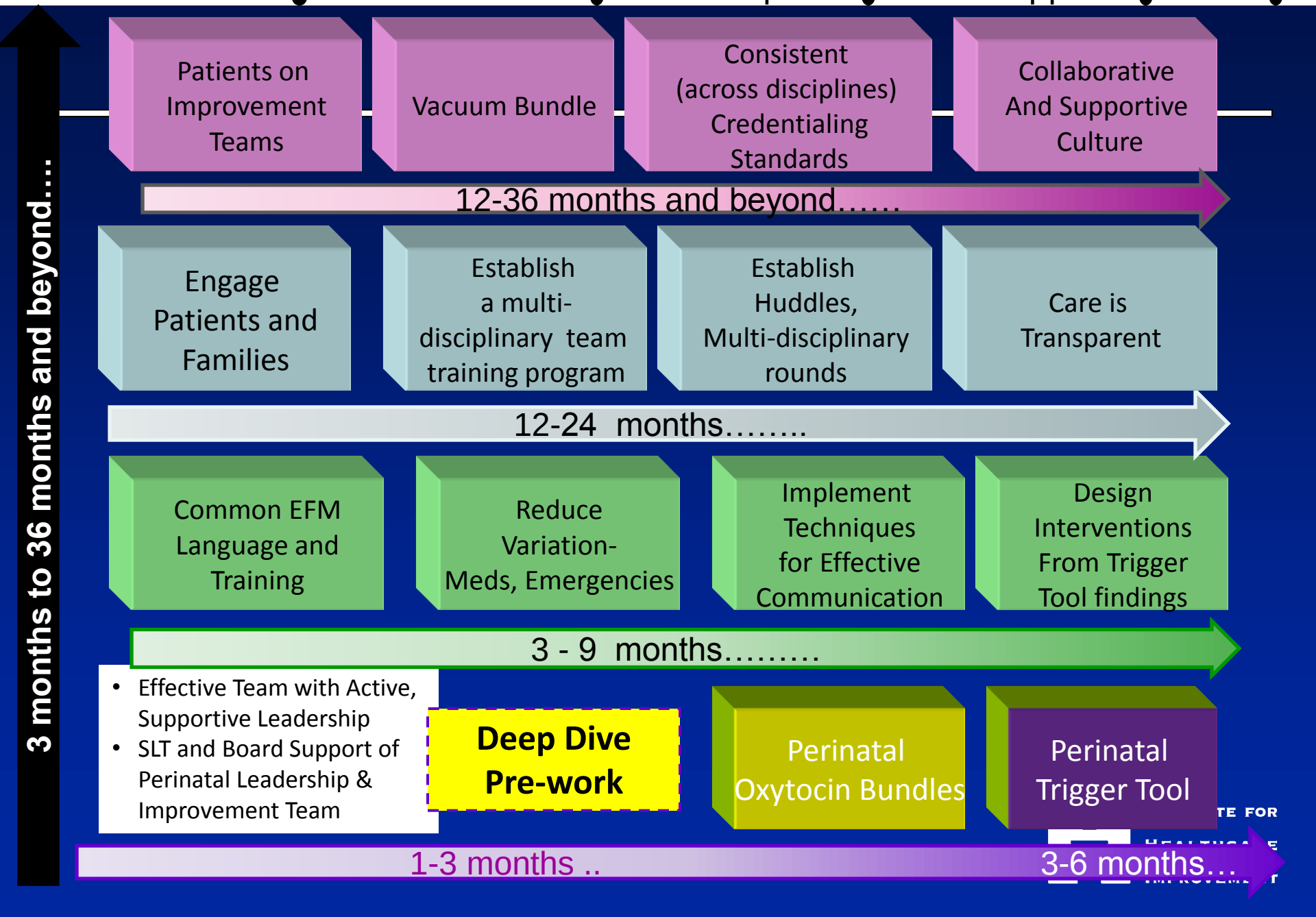
Effective Peer Teamwork

- Adopt common language and interpretation of EFM with multi-disciplinary training i.e NICHD criteria
- Implement techniques for effective communication i.e. SBAR
- Establish reliable techniques for handoffs
- Establish Team Response Protocols
- Implement Huddles
- Design Simulations

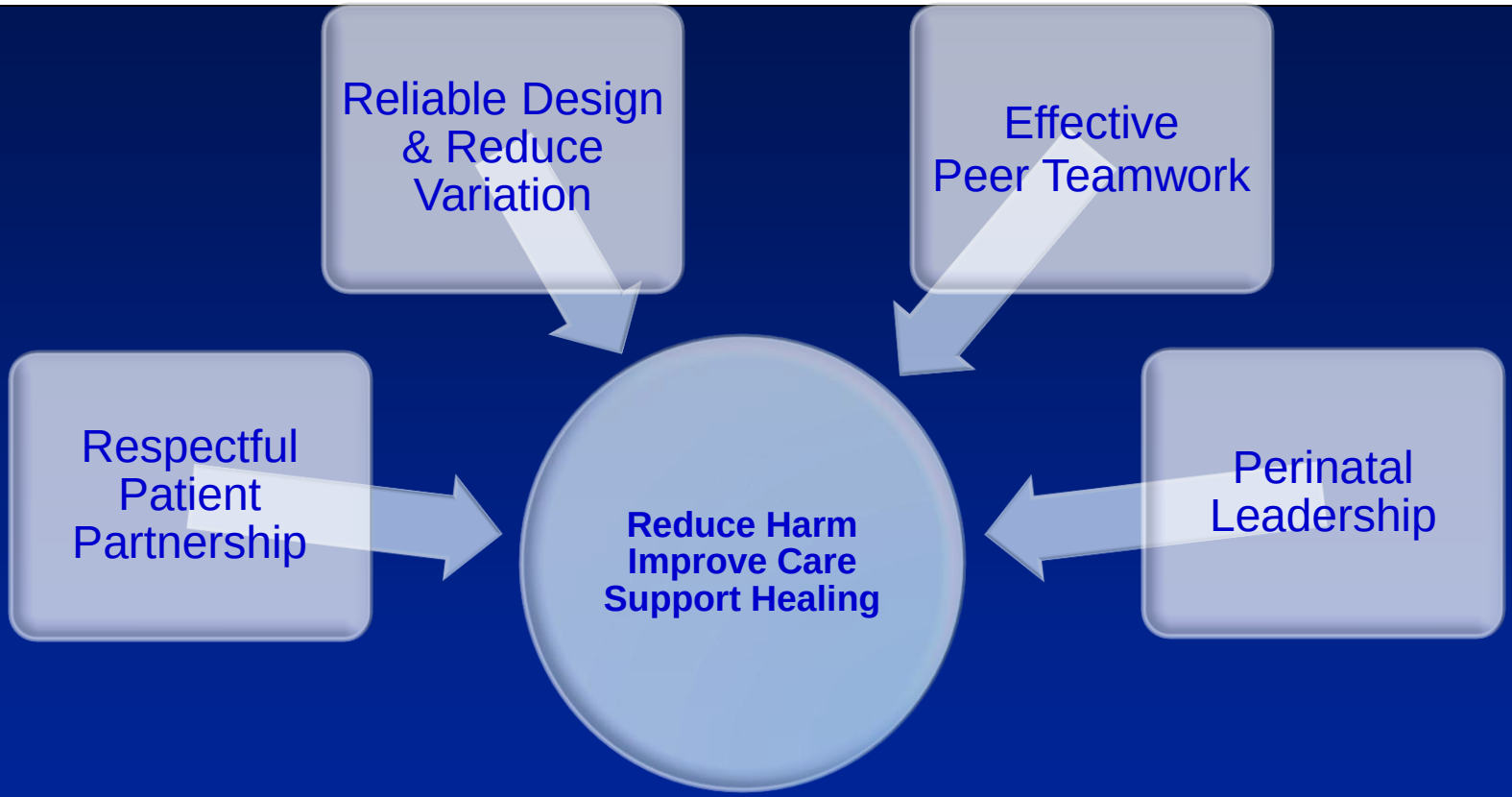
Respectful Patient Partnership

- Design processes to support partnership in care between provider and patient and family
- Develop with patient a customized interdisciplinary shared care plan
- Design care process improvement based on information obtained about patient experience (interviews, assessments, focus groups, surveys)
- Include patients and families on design and improvement teams
- Communicate openly and honestly with family and patients at regular intervals
- Do what you say, mean what you do

Perinatal Building Blocks: Reducing Harm, Improving Care, Supporting Healing



Perinatal Improvement Community Measurement Strategy



Collaborative Perinatal Goals

Reduce harm to 5 or less per 100 live births
Zero incidence of elective deliveries prior to confirmation of fetal maturity (39 weeks)
Augmentation Bundle(s) Composite or Compliance great than 90%
Improve organizational culture of safety survey scores in Perinatal units by 25%
100% of the participating teams will have documentation of Patient & Family Centered Care

Perinatal Quality Improvement

- Changing system of care into what?
  - Engage leadership/administration
  - Develop reliable systems of evidence-based care
    - Perinatal Bundles
  - Multidisciplinary training
  - Communication skills training
  - Measurement

The Reliability Design Strategy

- The development of reliable clinical processes to manage labor and delivery (Pitocin Bundles)
- The use of principles that improve safety (i.e., preventing, detecting, and mitigating errors)
- The establishment of prepared and activated care teams that communicate effectively with each other and with mothers and families

The Reliability Design Strategy

- Prevent initial failure
  - intent and standardization function
- Identify failure (defects) and mitigate
  - Redundancy function
- Measure and then communicate learning from defects
  - Redesign function

Why Standardize?

- Contributes to building an infrastructure (who does what, when, where, how and with what)
- Support training and competency testing to sustain the process
- Achieve front line articulation of key processes by staff
- Allows the appropriate application of Evidence Based Medicine consistently
- Feedback about errors and application of learning to design is possible

- The Clinical Bundle as Standardization

What is a Clinical Bundle?

- A group of clinical events that should happen every time a given process occurs
- Individual elements based on solid science
- Emphasis initially on process rather than outcome
- Based on failure modes
- Eventual endpoint is outcome improvement

The Hard and Fast Rules of climbing above 25,000 feet

- Acclimatization at altitude
- Work together
- Cannot assist someone on the ascent
- Fixed turn around time

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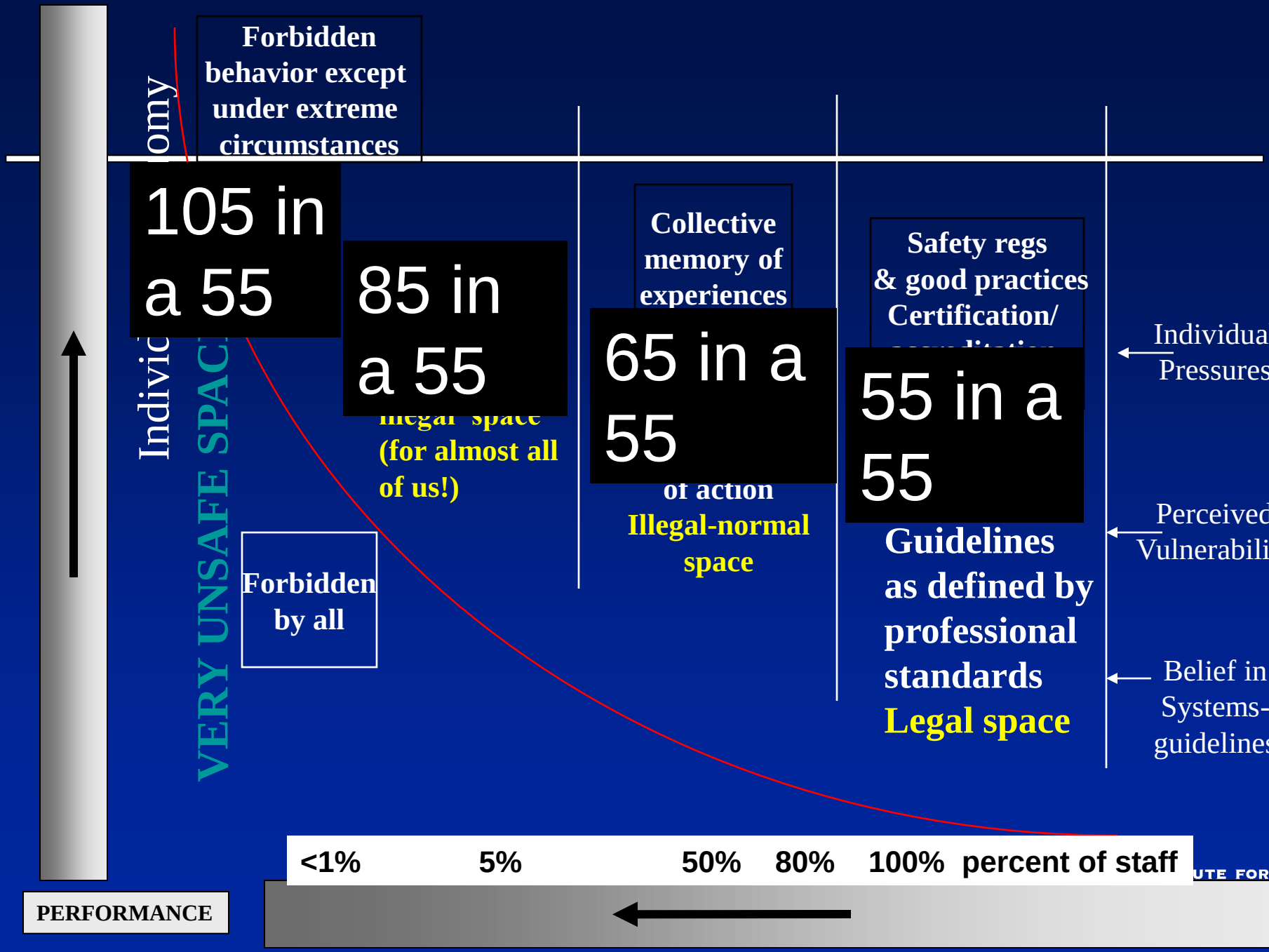
Summit Bundle

- Standard acclimatization techniques
  - # days and at what altitude
- Practice team work (between and among teams)
- No “short-roping” on the ascent
  - No assisting with climbing on the ascent
- Turn around time fixed and honored
  - (1 PM for most groups)


Forbidden behavior except under extreme circumstances
105 in a 55
85 in a 55
(for almost all of us!)
Collective memory of experiences
65 in a 55
of action
Illegal-normal space
Safety regs & good practices Certification/
55 in a 55
Guidelines as defined by professional standards
Legal space
Individual Pressures
Perceived Vulnerability
Belief in Systems-guidelines
Forbidden by all
VERY UNSAFE SPAC
<1%
5%
50%
80%
100%
percent of staff
PERFORMANCE

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- Why should we measure?
  - Measuring obstetric quality is the first step in improving obstetric quality
- What should we measure?
  - Outcome measures
    - Assume all adverse events are preventable
    - Perinatal Trigger Tool
  - Structure and process measures
    - Oxytocin deep-dive, Labor deep-dive

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- In conclusion:
  - The majority of perinatal harm is preventable
  - It's not an individual issue, it's a system issue
  - We need to change our system of care in order to reliably deliver safe care
  - We need engaged leadership to support the change
  - We need to adopt the right perinatal measures that appropriately reflect the care we provide and drive our improvement plans

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